AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended) A protocol for driving adriving method for a passive liquid crystal display, comprising:
- (i) a row (common) driving matrix; said matrix a plurality of orthogonal addressing functions; wherein
- (ii) consisting of orthogonal block circulant matrices said plurality of orthogonal addressing function is applied simultaneously to a plurality of rows of the said display matrix;
- (iii) said plurality of orthogonal addressing functions comprising a row (common) driving matrix and wherein;
- (iv) said plurality of orthogonal addressing functions is represented by an orthogonal block-circulant matrix.
- 2. (Currently Amended) A protocol method as defined in Claim 1, wherein there are row and column interchanges of said row (common) driving matrix addressing functions.
- 3. (Deleted)
- (Currently Amended) A protocol method as defined in Claim, wherein said row (common) driving matrix is a block diagonal matrix, said block diagonal matrix comprising building blocks, and wherein all the building blocks are orthogonal block-circulant.
- Currently Amended) A protocol thethod as defined in Claim A, wherein said row (common) driving matrix is a row and column interchanged version of the row (common) driving matrix.

(Currently Amended) A protocol method as defined in Claim 1, wherein said row (common) driving matrix comprises orthogonal block-circulant building blocks generated by using a paraunitary matrix.

(Currently Amended) A protocol method as defined in Claim of, wherein said driving matrix is

$$\begin{bmatrix} 1 & 0 & 1 & 0 & -1 & 0 & 1 & 0 \\ -1 & 0 & -1 & 0 & -1 & 0 & 1 & 0 \\ -1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 \\ -1 & 0 & 1 & 0 & -1 & 0 & -1 & 0 \\ 0 & 1 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -1 & 0 & -1 & 0 & -1 & 0 & 1 \\ 0 & -1 & 0 & 1 & 0 & 1 & 0 & -1 \end{bmatrix}.$$

(Currently Amended) A protocol method as defined in Claim 1, wherein said row (common) driving matrix is based on orthogonal block-circulant building blocks generated by nonlinear programming.

(Currently Amended) A protocol method as defined in Claim 8, wherein said row (common) driving matrix is based on order-4 orthogonal block-circulant building blocks.

10. (Currently Amended) a protocol method as defined in Claim 8, wherein said row (common) driving matrix is based on order-8 orthogonal block-circulant building blocks.

Application No. 09/678,058

Page 5

He driving change (Currently Amended) A protocol as defined in Claims, wherein said building

$$\begin{bmatrix} 1 & 1 & -1 & 1 \\ 1 & 1 & 1 & -1 \end{bmatrix}$$

(2)

$$\begin{bmatrix} -1 & 1 & 1 & 1 \\ 1 & 1 & 1 & -1 \end{bmatrix};$$

(3)

$$\begin{bmatrix} -1 & 1 & -1 & -1 \\ 1 & 1 & -1 & 1 \end{bmatrix};$$

(4)

$$\begin{bmatrix} -1 & -1 & -1 & 1 \\ 1 & 1 & -1 & 1 \end{bmatrix}$$

- all alternatives of (1)-(4) generated by
 - sign inversion (i.e., -E);
 - (ii) row interchange, i.e.,

10001

$$\begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix} E;$$

(iii) circulant shift of E, i.e.,

ER 4,2

and any combinations of (i)-(iii).

Application No. 09/678,058

The during selection 10. 09/078,0.

Page

(Currently Amended) A protection as defined in Claim 10, wherein said building blocks comprise

(1)

(2) $\begin{bmatrix} 1 & 1 & 1 & -1 & 1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & -1 & 1 & 1 & -1 \end{bmatrix}$

(3)

$$\begin{bmatrix} 1 & 1 & -1 & -1 & -1 & 1 & -1 & -1 \\ 1 & 1 & 1 & 1 & -1 & 1 & 1 & -1 \end{bmatrix}$$

(4)

(5)

(6)

(7)

$$\begin{bmatrix} -1 & 1 & -1 & 1 & 1 & 1 & -1 & -1 \\ 1 & 1 & 1 & 1 & -1 & 1 & 1 & -1 \end{bmatrix}$$

(8)

(9)

1000

Received from < 3108205988 > at 8/21/03 11:21:10 PM [Eastern Daylight Time]

(10)

(11)

(12)

(13)

(14)

$$\begin{bmatrix}
1 & -1 & 1 & -1 & 1 & -1 & -1 & 1 \\
1 & 1 & 1 & 1 & 1 & 1 & -1 & -1
\end{bmatrix}$$

(15)

(16)

(17)

(18)

(19)

(20)

•

(21)

(22)

(23)

(24)

(25)

(26)

(27)

- (28) all alternatives of (1)-(27) generated by
 - (i) sign inversion (i.e., -E);
 - (ii) row interchange, i.e.,

16030

$$\begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix} E;$$

(iii) circulant shift of E, i.e.,

$$ER_{8-2}$$

=1, 2, or 3, and any combinations of (i)-(iii).

V C-13.

(Currently Amended) A liquid crystal display, wherein there is a driving scheme and a protocol as defined in Claim 1.